

## **REMARKS / ARGUMENTS**

In complete response to the Office Action dated April 7, 2008, on the above identified application, reconsideration is respectfully requested. Claims 11-20 are pending in this application.

With this amendment, claims 11 and 18 are amended. Claim 17 has been cancelled. The Specification is also amended.

### **Claim Rejections Under 35 U.S.C. § 112:**

Claims 11 and 18 are rejected under 35, U.S.C. 112 as having insufficient antecedent basis for the claims' limitation. Due to the aforementioned claim amendments, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

### **Claim Rejections Under 35 U.S.C. § 102:**

Claims 11, 13-16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakahara et al. (U.S. Patent 6,537,461, hereinafter '461). Nakahara '461 neither teaches nor suggests a step of exhausting the reducing gas from the film forming apparatus, prior to bringing the ruthenium metal into contact with the oxidizing gas. Nakahara '461 teaches a gas mixture of with oxidizing and reducing components, not sequential application of individual components.

Due to the aforementioned claim amendments, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

### **Claim Rejections Under 35 U.S.C. § 103:**

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over '461 as applied to claim 11, and further in view of Jelenkovic et al. (Degradation of RuO<sub>2</sub> thin films in hydrogen atmosphere at temperatures between 150 and 250 °C). Further to the argument above with respect to Nakahara '461, the Applicants respectfully contend that the addition of Jelenkovic does not remedy the deficiency of

the Nakahara '461 reference. Accordingly, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over '461 as applied to claim 11, and further in view of Nakahara et al. (U.S. PGPub 2003/0037802, hereinafter '802). While claim 17 has been cancelled, the Applicants address this rejection as if applied to Claim 11.

Nakahara '461 has been discussed as above. Nakahara '802, at paragraphs 99-101, teaches cleaning with a reducing gas comprising a halogen or halogenated gas, not with a reducing gas comprising hydrogen and inert gas. One of skill in the art would recognize the difficulties of cleaning with halogen type gases, in that safety concerns exist due to the reactivity of halogen based cleaning gases. Further, one of skill in the art would recognize that process steps/parameters for one species of cleaning gas (e.g. halogen based) are not necessarily compatible or interchangeable for a different species of cleaning gas (e.g. hydrogen based). Therefore, the Applicants respectfully contend that the combination of Nakahara '461 with Nakahara '802 in fact teaches away from the claim 11 of the instant application.

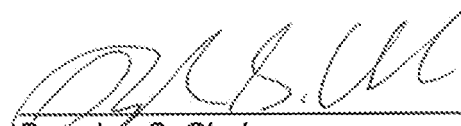
Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over '461 as applied to claim 11, and further in view of Phillips et al. (U.S. Patent 6,458,183, hereinafter '183). Further to the argument above with respect to Nakahara '461, the Applicants respectfully contend that the addition of Phillips '183 does not remedy the deficiency of the Nakahara '461 reference. Accordingly, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

Appl. No. 10/583,641  
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Response to Office Action of April 7, 2008

## CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance. Early notice to this effect is earnestly solicited. Should the Examiner believe a telephone call would expedite the prosecution of the application, he is invited to call the undersigned attorney at the number listed below.

Respectfully submitted,



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